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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/066,061	04/24/1998	MATTHEW ZAVRACKY	KPN97-04A2	8310

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EXAMINER
NGUYEN, JIMMY H

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/066,061	ZAVRACKY ET AL.	
	Examiner	Art Unit	
	Jimmy H. Nguyen	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 April 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14,16,17,25-29 and 37-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14,16,17,25-29 and 37-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *23* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 04/29/2002. Claims 14, 16, 17, 25-29 and 37-39 are currently pending in the application. An action follows below:

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14, 16, 17, 25-29 and 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims above, it is not clear what the Applicant means "**that**" as recited in independent claim 14, line 13, i.e., the housing or the card reader operates at least at 15 MHZ and receives video input.

In order to overcome the above rejection, it is suggested that claim 14, lines 13-15, should be read as "a card reader positioned within the housing, operating at least at 15 MHZ and receiving video input ... card reader".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 14, 25-27 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. (USPN: 5,867,795, cited in IDS filed on 11/22/99 and entered as Paper No. 8) in view of Stewart et al. (USPN: 5,337,068, cited in IDS filed on 05/10/02 and entered as Paper No. 23) and Kitazima et al. (USPN: 4,532,506, cited in IDS filed on 05/10/02 and entered as Paper No. 23).

As per claims 14, 25-27 and 37-39, the claimed invention reads on Novis et al. as follows: Novis et al. discloses a portable display system (see fig. 1) comprising a housing (11); a liquid crystal display (LCD 20/60) mounted to the housing and inherently including an array of pixel electrodes (a visual LCD display 20/60, fig. 8, col. 7, lines 62-66); a lens (lens 44/62, col. 7, lines 44-46 and lines 58-59) that magnifies an image on the display; and a card reader (a slot 16) within the housing that receives video input to be displayed on the display from a smart card or a memory card (a smart card 18, col. 3, lines 46-51) that docks with the card reader (further see figs. 1, 5 and 8, col. 3, lines 25-51 and col. 7, lines 40-66). Further, Novis et al. do not disclose the particular operating frequency of the card reader. However, absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the particular operating frequency of the card reader, as desired as was judicially recognized in **re Rose, 105 USPQ 237 (CCPA 1955) and in re Reven, 156 USPQ 679 (CCPA 1968)**. Accordingly, Novis et al. disclose all the subject matter claimed with the exception of the particular LCD as recited in the claim.

However, Stewart et al. discloses a portable display system (col. 2, lines 21-27) comprising an active matrix LCD (figs. 2A-2B) including an array of pixel electrodes (258), lamps (202-218) (corresponding to the claimed light source), a circuit (a circuit including 102-

112, see fig. 1) (corresponding to the claimed display control circuit) including a circuit (i.e., a circuit including a timing circuitry 110 and a commutator 112) (corresponding to the claimed timing circuit), further see fig. 6 and the corresponding description.

It would have been obvious to one of ordinary skill in the art to utilize the active matrix color sequential LCD of Stewart et al. in the system of Novis et al. because the active matrix LCD would enhance the revolution of the display and the backlight would enhance the luminance of the display, thereby allowing the user to view a better image. Accordingly, the combination of Stewart et al. and Novis et al. disclose all the subject matter claimed with the exception of the switching circuit.

However, Kitazima et al. disclose an active matrix LCD (fig. 6) including a counter electrode terminal voltage receiver (44) (corresponding to the claimed switching circuit) for switching a common voltage (V_{CM}) (see fig. 7, col. 5, lines 16-20) applied to counter electrode panel and having a high (Vc+Vb) or low (Vc-Vb) common voltage, further see col. 1, lines 51-56.

It would have been obvious to one of ordinary skill in the art to utilize the switching circuit of Kitazima et al. in the system of Novis et al. because the AC driving waveform applied to counter electrode can prolong the life of the LCD. Therefore, it would have been obvious to combine Kitazima et al. and Stewart et al. with Novis et al. to obtain the invention as specified in claims above.

6. Claims 16, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Stewart et al. and Kitazima et al. as applied to claim 14 above, and further in view of Ohtsuki et al. (USPN: 5,786,665).

Regarding to claim 16, Stewart et al further teach the light source being a fluorescent device (col. 5, lines 10-12), but does not disclose expressly the light source being a light emitting diode (LED) device, as claimed. Accordingly, Novis et al. in view of Kitazima et al. and Stewart et al. disclose the claimed subject matter except for the fluorescent device instead of the claimed LED device.

However, Ohtsuki et al. disclose a LCD device comprising a light source being LED device instead of fluorescent device, thereby reducing the thickness of the display device and reducing the cost for a user (col. 35, lines 7-15).

It would have been obvious to one of ordinary skill in the art to utilize the LED device of Ohtsuki et al. in the device of Novis et al. because this would provide a thinner display device and reduce the cost to a user, as taught by Ohtsuki et al. (col. 35, lines 7-15). Therefore, it would have been obvious to combine Ohtsuki et al., Kitazima et al. and Stewart et al. with Novis et al. to obtain the invention as specified in claim above.

Regarding to claims 17 and 28 as applied to claim 16 above, Novis et al. in view of Michel et al. discloses the claimed invention except for the particular size of the array of pixel electrodes. Absent a showing of criticality it would have been within the level of skill in the art and obvious to one having ordinary skill to engineering design the size of the array of pixel electrodes as desired as was judicially recognized in **re Rose, 105 USPQ 237 (CCPA 1955) and in re Reven, 156 USPQ 679 (CCPA 1968)**. In the instant case, the size of the array of pixel electrodes in considered as an obvious design choice since each pixel of the active matrix LCD is controlled by a TFT switch which is integrated on a substrate and the pixel can be made in a very small size. Therefore, these claims are rejected for the reason as set forth above.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novis et al. in view of Stewart et al., Kitazima et al. and Ohtsuki et al., as applied to claim 16 above, and further in view of Zavracky et al. (USPN: 5,206,749).

Regarding to claim above, Novis et al. in view of Stewart et al., Kitazima et al. and Ohtsuki et al. disclose the active LCD device, but do not disclose expressly the LCD display comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as claimed.

However, Zavracky et al. discloses a display system in which the LCD display panel comprising an array of transistor circuits formed with single crystal silicon, and the array of transistor circuits being bonded to an optically transmissive substrate with an adhesive layer as recited in claim above (see summary).

It would have been obvious to one of ordinary skill in the art to substitute the LCD panel of Novis et al. for a high quality LCD display panel of Zavracky et al. because such high quality LCD display panel would drive the image with desired speed and would reduce the cost of fabrication, as taught by Zavracky et al. (col. 1, lines 53-56). Therefore, it would have been obvious to combine Zavracky et al. and Michel et al. with Novis et al. to obtain the invention as specified in claim above.

Response to Arguments

8. Applicant's arguments with respect to independent claim 14 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicants' argument that the reference fails to show certain features of applicants' invention, it is noted that the features upon which applicants state "Therefore, ... the claimed timing circuit that determines ... claim 14", page 6, second paragraph, is not recited in the rejected claims filed in the previous amendment. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims, please see the new rejection above.

In response to Applicant's request for reconsideration of the 35 USC 112, first paragraph rejection, page 4, since claims 30 and 32-36 are cancelled and claim 14 is amended to overcome the 35 USC 112, first paragraph rejection, the rejection is no longer applied to independent claim 14 and its dependencies.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JHN
July 8, 2002

BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600